

## Amendments to the Specification

Please amend the specification at page 5, line 34-page 7 line 13 as follows:

~~Fig. 1 is a photograph of a blot showing RT-PCR analysis of expression of *Ncb5or* in whole rat embryo 14 days post conception and in organs of embryo 18 days post conception.~~ is a bar graph showing blood glucose levels of *Ncb5or*  $-/-$  mice in the fed state and the fasting state.

Fig. 2 is a bar graph showing serum insulin levels of *Ncb5or*  $-/-$  mice in the fed state and the fasting state.

~~Fig. 2A is a diagram showing the *Ncb5or* wild-type allele, the knockout targeting construct and the targeted allele.~~

~~Fig. 2B is a photograph of a blot showing genotyping of mice by multiplex PCR.~~

~~Fig. 2C is a photograph of a Western blot showing *Ncb5or* expression in pancreata.~~

~~Fig. 2D is a photograph depicting expression of *Ncb5or* mRNA in isolated islets of  $+/+$  mice.~~

~~Fig. 2E is a photograph of a Northern blot and RT-PCR analyses of *Ncb5or* mRNA in liver and kidney. The mRNA detected in  $-/-$  mice was derived from the knockout allele which lacks the entire exon4. WT = wild type. HT = heterozygote. KO = knockout.~~

~~Fig. 3 is a bar graph showing blood glucose levels of *Ncb5or*  $-/-$  mice in the fed state and the fasting state.~~ is a photograph of a blot showing RT-PCR analysis of expression of *Ncb5or* in whole rat embryo 14 days post conception and in organs of embryo 18 days post conception.

Fig. 4A is a bar chart showing blood glucose levels of 4 week old male *Ncb5or*  $+/+$ ,  $+/-$ , and  $-/-$  mice. N = 7-9 mice in each group. Error bars designate mean $\pm$ -SEM. \* =  $p < 0.05$ , \*\* =  $p < 0.01$  and \*\*\* =  $p < 0.001$ , unpaired two-tailed t test.

Fig. 4B is a bar chart showing serum insulin levels of 4 week old male *Ncb5or*  $+/+$ ,  $+/-$ , and  $-/-$  mice. N = 7-9 mice in each group. Error bars designate mean $\pm$ -SEM. \* =  $p < 0.05$ , \*\* =  $p < 0.01$  and \*\*\* =  $p < 0.001$ , unpaired two-tailed t test.

Fig. 4C is a line graph showing glucose tolerance test on 4 week old male *Ncb5or*<sup>+/+</sup>, *+/±*, and *-/-* mice. N = 7-9 mice in each group. Error bars designate mean $\pm$ -SEM. \* =  $p < 0.05$ , \*\* =  $p < 0.01$  and \*\*\* =  $p < 0.001$ , unpaired two-tailed t test.

Fig. 4D is a bar chart showing blood glucose levels of 7 week old male *Ncb5or*<sup>+/+</sup>, *+/±*, and *-/-* mice. N = 7-9 mice in each group. Error bars designate mean $\pm$ -SEM. \* =  $p < 0.05$ , \*\* =  $p < 0.01$  and \*\*\* =  $p < 0.001$ , unpaired two-tailed t test.

Fig. 4E is a bar chart showing serum insulin levels of 7 week old male *Ncb5or*<sup>+/+</sup>, *+/±*, and *-/-* mice. N = 7-9 mice in each group. Error bars designate mean $\pm$ -SEM. \* =  $p < 0.05$ , \*\* =  $p < 0.01$  and \*\*\* =  $p < 0.001$ , unpaired two-tailed t test.

Fig. 4F is a line graph showing glucose tolerance test on 7 week old male *Ncb5or*<sup>+/+</sup>, *+/±*, and *-/-* mice. N = 7-9 mice in each group. Error bars designate mean $\pm$ -SEM. \* =  $p < 0.05$ , \*\* =  $p < 0.01$  and \*\*\* =  $p < 0.001$ , unpaired two-tailed t test.

Fig. 4G is a line graph showing food intake of 7-9 week old male *Ncb5or*<sup>+/+</sup>, *+/±*, and *-/-* mice. N = 7-9 mice in each group. Error bars designate mean $\pm$ -SEM. \* =  $p < 0.05$ , \*\* =  $p < 0.01$  and \*\*\* =  $p < 0.001$ , unpaired two-tailed t test.

Fig. 4H is a bar chart showing perirenal fat of 7-9 week old male *Ncb5or*<sup>+/+</sup>, *+/±*, and *-/-* mice. N = 7-9 mice in each group. Error bars designate mean $\pm$ -SEM. \* =  $p < 0.05$ , \*\* =  $p < 0.01$  and \*\*\* =  $p < 0.001$ , unpaired two-tailed t test.

Fig. 4I is a line graph showing serum triglycerides level of 7-9 week old male *Ncb5or*<sup>+/+</sup>, *+/±*, and *-/-* mice. N = 7-9 mice in each group. Error bars designate mean $\pm$ -SEM. \* =  $p < 0.05$ , \*\* =  $p < 0.01$  and \*\*\* =  $p < 0.001$ , unpaired two-tailed t test.

~~Fig. 5 is a bar graph showing serum insulin levels of *Ncb5or*<sup>-/-</sup> mice in the fed state and the fasting state.~~

Fig. 5A is a diagram showing the *Ncb5or* wild-type allele, the knockout targeting construct and the targeted allele.

Fig. 5B is a photograph of a blot showing genotyping of mice by multiplex PCR.

Fig. 5C is a photograph of a Western blot showing *Ncb5or* expression in pancreata.

Fig. 5D is a photograph depicting expression of *Ncb5or* mRNA in isolated islets of +/+ mice.

Fig. 5E is a photograph of a Northern blot and RT-PCR analyses of *Ncb5or* mRNA in liver and kidney. The mRNA detected in -/- mice was derived from the knockout allele which lacks the entire exon4. WT = wild type. HT = heterozygote. KO = knockout.